(a) whether Government propose to launch Jai Vigyan Health Project in the rural areas of the country;

(b) if so, the names of districts which have been identified for the same in Madhya Pradesh, Maharashtra and Chhattisgarh; and

(c) whether Government propose to associate private sectors and NGOs also in this regard?

THE MINISTER OF STATE IN THE DEPARTMENT OF SCIENCE AND TECHNOLOGY IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BACHI SINGH RAWAT) : (a) No Sir.

(b) and (c) Do not arise.

Prediction on monsoon

3307. DR. C. NARAYANA REDDY:
SHRI PARMESHWAR KUMAR AGARWALLA:
SHRI EKANATH K. THAKUR
SHRI P.K. MAHESHWARI :

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that Indian Meteorological Department's predictions on monsoon rain fall this year are not correct;

(b) whether it is also a fact that predictions of foreign agencies are correct;

(c) whether it is also a fact that the Department of Meteorology has failed in providing correct information and right forecast of monsoon for the last several years;

(d) if so, what are the main factors responsible for this; and

(e) how Government propose to improve the work efficiency of the Indian agencies?

THE MINISTER OF STATE IN THE DEPARTMENT OF SCIENCE AND TECHNOLOGY IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BACHI SINGH RAWAT) : (a) No, Sir. India

Meteorological Department (IMD) had predicted that the rainfall for the country as a whole for the month of July 2003 was likely to be 102% of Long Period Average (LPA) with a model error of ± 9%. The actual rainfall in July 2003 was 107% of LPA. Thus the Long Range Forecast of IMD was correct.

IMD had also predicted that the rainfall over the country as a whole in the southwest monsoon season (June-September) was likely to be 98% of LPA with a model error of ± 4%. This forecast can be verified only after the end of the monsoon season.

(b) No, Sir. International climate prediction centres are not always right in their prediction. The U.S. National Centre for Environmental Prediction, Washington D.C., in its seasonal prediction for June - July - August 2003 rainfall issued in May 2003 had indicated deficient rainfall over India, in that period. However, the actual rainfall over the country from 1 June to 6 August 2003 has been 106% of LPA.

(c) No, Sir. From 1988 to 2001, the country has received normal monsoon rainfall every year and this was correctly forecast by IMD with its 16-parameter statistical model. However, in 2002, IMD's forecast had a large deviation of 20% from the actual value.

(d) and (e) The 16-parameter model used by IMD was subjected to a thorough review and it was found that some parameters had lost their statistical correlation with the monsoon rainfall over time. This model has now been replaced by an 8-parameter model which uses data upto March and a 10-parameter model which uses data upto June. The new parameters are well-correlated with the monsoon rainfall and are stable over time.

From this year, IMD has also adopted probabilistic models, which give the probability of rainfall occurring in various categories *viz.*, drought, below normal, near normal, above normal and excess.

Assistance to Jharkhand for development of S&T

†3308. SHRI ABHAY KANT PRASAD: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether Government have received proposals from Government of Jharkhand for development of Science and Technology in the State;

†Original notice of the question was received in Hindi.